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A *SPHINGOMONAS* BIODESULFURIZATION CATALYST

Abstract of the Disclosure

The invention relates to a novel microorganism, designated *Sphingomonas* sp. strain AD109, which is 5 capable of selectively desulfurizing dibenzothiophene. The invention also includes isolated proteins and nucleic acid sequences obtained from this microorganism.

In another embodiment, the invention provides a method of using this microorganism or enzyme preparations 10 derived therefrom in the biocatalytic desulfurization of a fossil fuel containing organic sulfur compounds.